

SYSTEM AND METHOD FOR ADDRESSABLE LIGHT- DIRECTED MICROARRAY PRINTING

Abstract of Disclosure

Systems and methods are described for synthesizing probe arrays of polymers. In one such system, a network server processes customer orders to provide data indicative of at least one probe array sequence desired by the customer to be included in a synthesized probe array. A probe array design and control computer executes a probe array design application that processes the probe and array configuration data to provide probe array design data that is then processed by a manufacturing control application to provide gating data. A probe array manufacturing apparatus selectively switches optical transfer elements between substantially light-passing and substantially light-not-passing states in response to the gating data. Light from those optical transfer elements in the light-passing states strikes one or more biological probe array substrates, thereby enabling selective addition of monomers, such as nucleotides, amino acids or saccharides, to the substrate.

Continued on next page

Figures

Figure 1: A vertical column of small, illegible text or symbols, possibly a list of items or a table of contents.